

# Exhibit B

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Wachendorff-Neumann *et al.*

Appl. No.: 10/573,066

§ 371 (c) Date: October 24, 2006

For: **Synergistic Fungicidal Active Sub-  
stance Combinations**

Confirmation No.: 6965

Art Unit: 1627

Examiner: Pihonak, Sarah

Atty. Docket: 2400.0230000/RWE/PDL

**Declaration of Ulrike Wachendorff-Neumann Under 37 C.F.R. §1.132**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

I, Ulrike Wachendorff-Neumann, of Oberer Markenweg 85, 56566

Neuwied, Germany, a citizen of Germany, hereby declare:

1. that I am a biologist having studied at the University of Bonn, Germany;
2. that I received my PhD degree in biology at the University of Bonn,  
Germany, in 1982;
3. that I entered the employment of Bayer AG in 1982 and am now  
employed by Bayer CropScience AG;
4. that I currently hold the position of head of profiling, dicots,  
in which I supervise the biological tests of fungicides; and that I have held  
this position for 11 years;
5. that I am named as an inventor in U.S. Patent Application No. 10/573,066  
("Application"), which has been assigned to Bayer CropScience AG;

6. that I have read and understand the specification and claims of the Application;

7. that (1-1) bixafen (recited in the Application on page 41, line 16, as *N*-(3',4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1*H*-pyrazole-4-carboxamide), (3-15) prothioconazole, and (3-17) tebuconazole, described in the Application, were tested as described in the Example below;

8. that the Example below, entitled "Venturia test (apples) / preventative" was carried out under my supervision and direction;

9. that the expected activity for a given combination of two active compounds can be calculated as follows (cf. Colby, S.R., "Calculating Synergistic and Antagonistic Responses of Herbicide Combinations," *Weeds* 1967, 15, 20-22):

If

X is the efficacy when active compound A is applied at an application rate of m ppm (or g/ha),

Y is the efficacy when active compound B is applied at an application rate of n ppm (or g/ha),

E is the efficacy when the active compounds A and B are applied at application rates of m and n ppm (or g/ha), respectively, and

then

$$E = X + Y - \frac{X \cdot Y}{100} ;$$

10. that the degree of efficacy, expressed in % is denoted: 0 % means an efficacy which corresponds to that of the control while an efficacy of 100 % means that no disease is observed; and

11. that if the actual fungicidal activity exceeds the calculated value, then the activity of the combination is superadditive, i.e. a synergistic effect exists.

12. Example: **Venturia test (apples) / preventive**

Solvent:	24.5 parts by weight of acetone
	24.5 parts by weight of dimethylacetamide
Emulsifier:	1 part by weight of alkylaryl polyglycol ether

To produce a suitable preparation of active compound, 1 part by weight of active compound is mixed with the stated amounts of solvent and emulsifier, and the concentrate is diluted with water to the desired concentration. To test for preventive activity, young plants are sprayed with the preparation of active compound at the stated rate of application. After the spray coating has dried on, the plants are inoculated with an aqueous conidia suspension of the causal agent of apple scab (*Venturia inaequalis*) and then remain for 1 day in an incubation cabinet at approximately 20°C and a relative atmospheric humidity of 100 %. The plants are then placed in a greenhouse at approximately 21°C and a relative atmospheric humidity of approximately 90 %. The test is evaluated 10 days after the inoculation. 0% means an efficacy which corresponds to that of the untreated control, while an efficacy of 100% means that no disease is observed. The table below clearly shows that the observed activity of the active compound combination according to the invention is greater than the calculated activity, i.e. a synergistic effect is present.

Table**Venturia test (apples) / preventive**

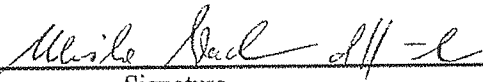
Active compounds	Application rate of active compound in ppm a.i.	Efficacy in %	
		found*	calc.**
(1-1) Bixafen	0.25	58	
(3-15) Prothioconazole	2.5	31	
	1.25	16	
(3-17) Tebuconazole	2.5	29	
	1.25	0	
(1-1) + (3-15) 1:10	0.25 + 2.5	91	71
(1-1) + (3-15) 1:5	0.25 + 1.25	74	65
(1-1) + (3-17) 1:10	0.25 + 2.5	95	70
(1-1) + (3-17) 1:5	0.25 + 1.25	89	58

\* found = activity found

\*\* calc. = activity calculated using Colby's formula

13. The undersigned declares further that all statements made herein of his/her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed at Monheim, Germany,

2010-12-10	
Date	Signature
<small>1292599_1.doc</small>	